

NOTES ON THE GENUS *LEPIDIUM* [N.O. CRUCIFERÆ].  
FROM THE NATIONAL HERBARIUM, SYDNEY.

BY A. A. HAMILTON.

In a monograph of the genus *Lepidium* ("Die Gattung *Lepidium* (Linn.) R.Br.," von A. Thellung, 1906), the author, under *L. ruderale* Linn., (p.139) represents *L. ruderale* Hook. f., Fl. Tasm., i. (1860), p.25), as = *L. Desvauxii* Thell., *L. pseudo-tasmanicum* Thell., et *L. tasmanicum* Thell. He also depicts (*loc. cit.*) *L. ruderale* Benth., Fl. Austr., i., (1863) p.86, as a composite species, consisting of *L. puberulum* Bunge, + *L. hyssopifolium* Desv., + *L. Desvauxii*, *L. fasciculatum*, *L. pseudo-ruderale*, *L. pseudo-tasmanicum*, et *L. sagittulatum*, all of Thell., + *L. Merralli* F.v.M., + *L. foliosum* Desv., var. *fruticulosum* (Desv.); and shows that *L. ruderale* var. (?) *spinescens* (*l.c.*) = *L. Ascheronii* et *L. dubium* Thell.

An examination of the material in the National Herbarium was undertaken, for comparison with Thellung's species; and seedlings were grown in the Sydney Botanic Gardens, with a view to obtaining the radical leaves, which, in some species, are fugacious, and consequently absent from many of our herbarium specimens. The resultant foliage has materially assisted in the identification of a number of specimens.

Of the species enumerated above, the research disclosed the following to be represented in the National Herbarium: - *L. Desvauxii* Thell., *L. pseudo-tasmanicum* Thell., *L. hyssopifolium* Desv., *L. fasciculatum* Thell., *L. pseudo-ruderale* Thell., and *L. dubium* Thell.

*L. ruderale* Linn., according to Thellung, (*loc. cit.*) is not represented in Australia.

*L. DESVAUXII* Thell.

Seedling-leaves pinnate, with few distant leaflets, lobed, deeply incised, or serrate at the apex, the lamina oblong-cuneate in out-

line, tapering into an elongated petiole. The leaves of the adult plants are narrow-linear for the greater part of their length, dilated towards the apex, which is toothed or lobed, and occasionally with a few marginal teeth, the margins sparsely sprinkled with short, flat, triangular hairs.

This species is recorded from West Australia, Victoria, and Tasmania by Thellung, who quotes (p.308) the following specimens under his var. *a. typicum*, from various European Herbaria. West Australia: Swan River, (1848?) Drummond, ser.4, n.126.—Victoria: Herb. Olfield (? Oldfield, A.A.H.).—Tasmania: Gunn. (ex herb. Hook.), Archer (ex herb. Hook., cum. var. *β.*), and under his var. *γ. gracilescens* (p.309).—Swan River (1840?) Drummond, ser.2, n.51.

We have, in the National Herbarium, an example of Drummond's n.126, from W.A., and one of his n.51, 2nd coll., 1844, representing Thellung's vars. *a. typicum* and *γ. gracilescens*, respectively. The var. *a. typicum* is also represented in the National Herbarium by specimens from near Claremont and Subiaco, W.A., herb. W. V. Fitzgerald; a specimen labelled "Common about Melbourne, 3, 1853, S. G. Hannaford's Herb. of Tasmanian and Victorian Plants, and from numerous localities in N. S. Wales."

#### L. PSEUDO-TASMANICUM Thell.

Apparently confined to Tasmania. Thellung (p.307) quotes one specimen only for this species, viz., Tasmania: leg. W. Archer ex herb. Hook.), Herb. Deless.

We have a specimen from Archer's Herb. of Tasmanian Plants, without locality, date, or collector's name, which agrees with Thellung's description of this species.

#### L. HYSOPIFOLIUM Desv.

Seedling-leaves simple, broad linear to lanceolate; apex acute to acuminate, tapering at the base into a petiole, the margin serrate; tomentum cylindrical, sparse. The basal leaves of the adult plants, which are early deciduous, are similar to the seed-leaves, the cauline leaves gradually becoming narrower and

entire, or, occasionally, with a few remote teeth. Some forms of this species, when the basal leaves have fallen, simulate *L. Desvauxii* Thell., but the flat, triangular, marginal hairs of the latter provide a useful distinction. It is recorded by Thellung (p.305) from New South Wales, Victoria, and S. Australia. In the National Herbarium, it is represented from New South Wales only, its distribution ranging from the coast to the interior, but chiefly in the southern parts of the State; and includes a specimen collected by Banks and Solander, New Holland, 1770, named, as above, by the British Museum authorities.

A bundle of dry stems of this species was forwarded to the National Herbarium, by Messrs. Dalgety & Co., from the manager of a Station at Brewarrina, with the following information:—  
“The only feed here at present, eaten greedily, when dry, by sheep and cattle; yields good milk.”

#### L. FASCICULATUM Thell.

Seedling-leaves pinnate, finely dissected, the basal leaves similar, present only on young plants.

This species, which is readily distinguished by its corymbose inflorescence, is quoted by Thellung (p.306) from one locality only, viz., Victoria: Swan Hill, leg. ?, distrib. F. v. Mueller (pro *L. ruderales*) - herb., Petersbg.

Our herbarium-material shows that it is widely distributed in New South Wales, particularly in the interior; and we have several specimens from Queensland, including an example from Warwick, December, 1912; collected and named as above by the Acting Govt. Botanist of that State, Mr. C. T. White. It is also recorded for S. Australia by Mr. J. M. Black, in a recent publication, “Additions to the Flora of S. Australia, No.9.” Trans. Roy. Soc. S. Austr., xl., p.62, 1916.

#### L. PSEUDO-RUDERALE Thell.

The radical leaves of this species are pinnately lobed, as in *L. ruderales* Linn., but the cauline leaves retain their dissection—which is gradually decreased upwards—longer than those of the typical *L. ruderales* Linn. The siliqua of *L. pseudo-ruderales* is

elliptical, and slightly emarginate, as opposed to the ovate siliqua of *L. ruderale* Linn., with its broadly emarginate apex.

Thellung (p.303) quotes the following specimens of the above—S. Australia: Mount Lyndhurst, 1898, Max Koch, n.324; *ibidem*, 1899, Max Koch, n.272.—West Australia: Gascoyne, Carnarvon, L. Diels, n.3683. We have a co-type specimen of Max Koch's n.324, Mt. Lyndhurst, August, 1898, from the collector; and the following examples from New South Wales—Wyalong, Rev. J. W. Dwyer, 9.1915; Nyngan, J. L. Boorman, 8.1903; West Maitland, J. C. Burgess, 1.1911.

#### L. DUBIUM Thell.

Easily recognised by its spine-tipped branches and compact habit. This is the *L. ruderale* Linn., var. (?) *spinescens* of Bentham, Fl. Austr. (in part), quoted from S. Australia.

One locality only is recorded by Thellung (p.311) for this species, viz., Victoria: near Lake Corangamike (Corangamite, A.A.H.), leg. ?, distrib. F. v. Mueller.

In "Contributions to the Flora of Australia," No.25(Proc. Roy. Soc. Vict., xxix., N.S., p.142, 1917), Professor Ewart records Bentham's var (?) *spinescens* from Camperdown, Victoria, incidentally questioning its relationship to *L. ruderale* Linn. Professor Ewart's locality is some 12 miles west of Lake Corangamite. It was recorded in Proc. Linn. Soc. N. S. Wales, xxiv., p.64 (1899), from Narrabri in "Notes from Sydney Botanic Gardens, No.5" by Messrs. Maiden and Betche. Other specimens in the National Herbarium are from Temora, N.S.W., Rev. J. W. Dwyer, 10.1915; and an example from West Australia, Dr. F. Stoward, n 274, 12.1913.

In addition to the above, we have a co-type specimen of *L. Muelleri Ferdinandi* Thell., from the collector, Max Koch, n.388, Mt. Lyndhurst, S.A., 1898, the only record given by Thellung (p.290).

*L. Howei insulæ* Thell., (p.291) is also represented by specimens from Lord Howe Island, J. H. Maiden, 4.1898, and other collectors.

## L. LEPTOPETALUM F.v.M.

The following extracts are taken from a letter accompanying a series of specimens, including the above, forwarded to the National Herbarium for identification and report, by Mr. Walter Gill, Conservator of Forests, South Australia:—"Herewith some specimens which I found early this month (November) north-east of the Burra, about 70 miles in the dry district, with small uncertain rainfall. . . . . , Nos. 47, *L. leptopetalum* F.v.M., and 48, *Cratystylis conocephala* Sp. Moore, (*Pluchea conocephala* F.v.M.) which, I find, are regarded as valuable fodder-plants by the owner of the sheep-station on which I secured them."